

***NOTICE OF ALLOWANCE***

This action is in response to the amendment and declaration filed 2/25/09. Claims 1 and 26 have been amended. All of the amendments have been thoroughly reviewed and entered. The previous rejections in the Office action mailed on 10/8/08 are withdrawn in view of the amendments.

***EXAMINER'S AMENDMENT***

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Talivaldis Cepuritis on March 18, 2009.

Specification

The following sentence was inserted on page 1 of the specification immediately after the Title:

-- This application is a National Stage of PCT/US2004/033137, filed on October 7, 2004, which claims the benefit of U.S. Provisional Application No. 60/509,457, filed on October 8, 2003. --

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Abstract

A DNA vaccine suitable for eliciting an immune response against cancer cells comprises a polynucleotide construct operably encoding a Fra-1 protein, such as a polyubiquitinated human Fra-1 protein, and IL-18, such as human IL-18, in a pharmaceutically acceptable carrier. In a preferred embodiment, the polynucleotide construct is operably incorporated in an attenuated bacterial vector, such as an attenuated *Salmonella typhimurium*, particularly a doubly attenuated *aroA*<sup>-</sup> *dam*<sup>-</sup> *S. typhimurium*. Transformed host cells, methods of inhibiting tumor growth, of vaccinating a patient against cancer, and of delivering genetic material to a mammalian cell in vivo are also described.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Claims 1, 6-11, 23, 26-30, 36, 38-40, 43, 45, 46, 53, 58, 59 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Q. Janice Li** whose telephone number is 571-272-0730. The examiner can normally be reached on 9:30 am - 7 p.m., Monday through Friday, except every other Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Joseph Woitach** can be reached on 571-272-0739. The fax numbers for the organization where this application or proceeding is assigned are **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

*/Q. JANICE LI/  
Primary Examiner, Art Unit 1633*

Q. Janice Li, M.D.  
Primary Examiner  
Art Unit 1633